

§ 26.39 Newly produced airplanes: Fuel tank flammability.

(a) *Applicability*: This section applies to Boeing model airplanes specified in Table 1 of this section, including passenger and cargo versions of each model, when application is made for original certificates of airworthiness or export airworthiness approvals after December 27, 2010.

TABLE 1

Model—Boeing
747 Series
737 Series
777 Series
767 Series

(b) Any fuel tank meeting all of the criteria stated in paragraphs (b)(1), (b)(2) and (b)(3) of this section must have flammability reduction means (FRM) or ignition mitigation means (IMM) that meet the requirements of 14 CFR 25.981 in effect on December 26, 2008.

(1) The fuel tank is Normally Emptied.

(2) Any portion of the fuel tank is located within the fuselage contour.

(3) The fuel tank exceeds a Fleet Average Flammability Exposure of 7 percent.

(c) All other fuel tanks that exceed an Fleet Average Flammability Exposure of 7 percent must have an IMM that meets 14 CFR 25.981(d) in effect on December 26, 2008, or an FRM that meets all of the requirements of Appendix M to this part, except instead of complying with paragraph M25.1 of that appendix, the Fleet Average Flammability Exposure may not exceed 7 percent.

[Doc. No. FAA-2005-22997, 73 FR 42499, July 21, 2008, as amended by Amdt. 26-3, 74 FR 31619, July 2, 2009]

Subpart E—Aging Airplane Safety—Damage Tolerance Data for Repairs and Alterations

SOURCE: Docket No. FAA-2005-21693, 72 FR 70505, Dec. 12, 2007, unless otherwise noted.

§ 26.41 Definitions.

Affects (or Affected) means structure has been physically repaired, altered,

or modified, or the structural loads acting on the structure have been increased or redistributed.

Baseline structure means structure that is designed under the original type certificate or amended type certificate for that airplane model.

Damage Tolerance Evaluation (DTE) means a process that leads to a determination of maintenance actions necessary to detect or preclude fatigue cracking that could contribute to a catastrophic failure. As applied to repairs and alterations, a DTE includes the evaluation both of the repair or alteration and of the fatigue critical structure affected by the repair or alteration.

Damage Tolerance Inspection (DTI) means the inspection developed as a result of a DTE. A DTI includes the areas to be inspected, the inspection method, the inspection procedures, including acceptance and rejection criteria, the threshold, and any repeat intervals associated with those inspections. The DTI may specify a time limit when a repair or alteration needs to be replaced or modified. If the DTE concludes that DT-based supplemental structural inspections are not necessary, the DTI contains a statement to that effect.

DT data mean DTE documentation and the DTI.

DTE documentation means data that identify the evaluated fatigue critical structure, the basic assumptions applied in a DTE, and the results of a DTE.

Fatigue critical structure means airplane structure that is susceptible to fatigue cracking that could contribute to a catastrophic failure, as determined in accordance with § 25.571 of this chapter. Fatigue critical structure includes structure, which, if repaired or altered, could be susceptible to fatigue cracking and contribute to a catastrophic failure. Such structure may be part of the baseline structure or part of an alteration.

Implementation schedule consists of documentation that establishes the timing for accomplishing the necessary actions for developing DT data for repairs and alterations, and for incorporating those data into an operator's continuing airworthiness maintenance